

common objectives to replicate NTSC service areas and to minimize interference and disruption to the public if receivers do not perform at the level on which the DTV Allotments/Assignments are predicated.^{60/} The "cliff effect" of DTV signals requires that receivers maintain an adequate DTV signal at all times; otherwise, excessive interference will destroy reception entirely. We have run the DTV Allotments/Assignments using a 10 dB noise factor across the board and have found that it shows substantially increased interference to NTSC and DTV service and less replication. For example, a uniform 10 dB noise figure would result in 30% additional interference to the NTSC service, 68% additional interference to the DTV service and a 6% reduction in DTV service.^{61/}

The Commission has the authority under the All Channel Receiver Act to require that receivers be manufactured to receive all signals, whether UHF or VHF, at an acceptable quality.^{62/} We continue to urge the Commission to adopt minimum receiver standards that require adaptive equalizer circuits, tuner performance and noise figures necessary to protect DTV signals from interference. These standards might be phased in over a reasonable three or four-year transition period. In the alternative, and because receiver manufacturers have expressed the desire to be cooperative in this respect, the Commission should ask the manufacturing industry to provide periodic updates regarding the development of low noise-figure, DTV tuners -- much as the stations committed to a

^{60/} See Joint Comments IX at 60-61. For a fuller discussion of mandatory receiver standards, see e.g., Joint Comments VIII at 32-34; Joint Comments VI at 36-37; Broadcasters Allotment/Assignment Approach at 33.

^{61/} Note that a 10 dB noise figure will increase the number of stations subject to the power cap from 306 to 581.

^{62/} See Joint Comments VIII at 32-33.

voluntary, 18-month buildout have been asked to do. Such periodic reports will better enable the Commission, the relevant industries, and the public to monitor whether more regulatory steps are necessary.

B. WEIGHTED MASK.

In their comments on the Sixth Further Notice, Broadcasters stated that they would propose a tighter RF emission mask upon completion of the Advanced Television System Committee's work. While the ATSC proposal is still in draft,^{63/} Petitioners support the weighting-function approach of the ATSC proposal over the mask specified in the Sixth R&O. The mask specified in the Sixth R&O does not ensure protection of the NTSC service. Because the power and spacing relationships between NTSC and adjacent channel DTV transmitters are not fixed, a mask based on assumptions about minimum power ratios (*i.e.*, 12 dB) and antenna location spacing (*i.e.*, collocation) are not applicable. The impact of these assumptions could be to disrupt the NTSC service over the entire coverage contour. Petitioners urge the Commission to (i) replace the fixed mask with the weighting methodology soon to be recommended by the ATSC; (ii) require that the NTSC service be protected by limiting the weighted in-band interference from any DTV station to the level which has been determined experimentally to cause impairment; and (iii) account for DTV antenna placement and pattern variations in the calculation of the DTV spectral sidelobe attenuation.

^{63/} The current version, which is different from that included in the ATSC comments in this proceeding, is based upon use of a weighting function to determine the noise power due to DTV sidelobes allowable in each of twelve 500 kHz frequency bands across the 6 MHz NTSC channel. When weighted and summed across the channel, the noise must be below the threshold of visibility or audibility documented in previous subjective testing.

C. THE COMMISSION SHOULD TAKE STEPS TO ENSURE INTER-OPERABILITY WITH CABLE.

In response to the Fourth Further Notice, Broadcasters requested that the Commission take steps to ensure that cable adopted digital technologies that are compatible with the broadcast DTV transmission standard.^{64/} The important consumer benefits and the rapid roll-out of DTV that adoption of the DTV broadcast transmission standard makes possible could be lost if equipment manufacturers have to outfit DTV sets with expensive cable decoders to accommodate incompatibility between the DTV transmission standard and cable DTV standards. The same is true if consumers are forced to rely on set-top boxes in order to receive cable transmissions that are incompatible with sets designed to receive broadcast signals.^{65/} Consumers' experience over the last ten years with set-top boxes argues powerfully that the Commission should step in early to forestall a repeat of such confusion.

In the meantime, important segments of the cable industry have taken voluntary steps to standardize cable digital transmissions. The Society of Cable

^{64/} See Joint Comments VI at 38-39; Joint Comments VII at 18-21; see also Joint Comments VIII at 27-29.

^{65/} Compatibility between the broadcast and cable DTV standards will give consumers access to the full range of television programming in the same quality in which it is transmitted. Congress recognized the importance of this consumer benefit in enacting the must carry non-degradation requirement in the Cable Television Consumer Protection and Competition Act of 1992. 47 U.S.C. § 614(b)(4)(A). Further, the consumer will benefit by paying less for DTV equipment. Sufficient commonality between broadcast and cable standards will lower the price of cable-ready DTV sets and so speed the transition. Such commonality also will lessen the cable industry's control of access by affording cable and other video distribution companies fewer opportunities to use set-top boxes to close the gateways of competition. Also, insistence on cable compatibility will give clear direction to receiver manufacturers, thus spurring the mass production of digital sets and accelerating the DTV transition. Finally, compatibility will enhance the usefulness of ancillary consumer equipment such as VCRs.

Telecommunications Engineers ("SCTE") standard shares some features with the DTV transmission standard. However, important aspects of the standards are different and inconsistent. With appropriate Commission action, harmonization of the SCTE standard with the DTV standard should be straightforward. Without such action, Petitioners are concerned that harmonization will not occur. Petitioners strongly urge the Commission on reconsideration to adopt firm principles regarding harmonization of the SCTE standard with the DTV standard^{66/} and, thereafter, to move expeditiously to work out the necessary details for compatibility in a separate proceeding, as was anticipated in 1994.^{67/}

D. THE COMMISSION SHOULD NOW ADDRESS CHANNEL LABELING.

Petitioners are pleased that the Commission has agreed to allow an inter-industry committee to explore the appropriate channel assignment scheme for DTV. Sixth R&O ¶ 170. The Specialist Group on Transport Systems Documentation, a subgroup of the Advanced Television Systems Committee's Technology Group on Distribution has been exploring this issue and is developing proposals. In light of the expedited buildout schedule

^{66/} The Commission has long recognized the importance of cable compatibility. See Tentative Decision and Further Notice of Inquiry, MM Docket No. 87-268, 3 FCC Rcd. 6520 (1988) (supporting interoperability); Second Report and Order and Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 7 FCC Rcd. 3340 (1992) (proposing that ATV system must support carriage of ATV over cable systems); Memorandum Opinion and Order/Third report and Order/Third Further Notice of Proposed Rulemaking, MM Docket No. 87-268, 7 FCC Rcd. 6924 (1992) (endorsing efforts to ensure that ATV standard performs satisfactorily for both broadcast and cable operations); First Report and Order, ET Docket No. 93-7, 9 FCC Rcd. 1981 (1994) (noting that the development of a digital cable standard must consider the relationship of the cable system to the terrestrial broadcast ATV standard).

^{67/} In 1994, the Commission found that "standards for cable digital transmissions are desirable. These standards will be needed to ensure that compatibility is maintained as new digital cable technologies are introduced . . . [We] will initiate a separate action on these issues as is necessary to assure continuing compatibility in the future." In re Implementation of the Cable Act -- Compatibility Between Cable Systems and Consumer Electronics Equipment, ET Docket No. 93-7, First Report and Order ¶ 4 (May 4, 1994).

the Commission has imposed, however, stations and equipment manufacturers will need guidance on this important issue shortly. Petitioners thus urge the Commission to take affirmative steps to acknowledge and support this ongoing inter-industry activity. Specifically, the Commission should establish a definitive process (particularly with respect to the public involvement in this issue) and the time frame for a decision on this important issue.

**E. THE COMMISSION SHOULD ENSURE
THAT SIMULCASTING TARGET DATES COMPORT
WITH THE PROJECTED END-DATE OF NTSC SERVICE.**

The Fifth R&O (§§ 54-56) adopts a phased-in simulcasting requirement to begin near the end of the DTV transition. These phase-in dates are based on and tied to the Commission's target end of the transition in 2006. As stated in the Fifth R&O (§ 100), the 2006 end-date may be adjusted in the Commission's two-year review process. Petitioners request that the Commission also expressly consider simulcast target dates in its periodic review. Should the transition end-date be altered, the Commission should likewise adjust the simulcast target dates. Such an adjustment will ensure that simulcasting requirements, like the transition end-date, comport with consumer acceptance of DTV and will provide broadcasters with sufficient flexibility to program their DTV channels to best attract the public to the DTV service during the early stages of the transition.

**F. THE COMMISSION SHOULD TAKE OTHER STEPS TO FACILITATE DTV
STATION CONSTRUCTION.**

On May 30, 1997, MSTV and the NAB filed a petition for further notice of rulemaking in this proceeding to preempt state and local regulations that impede the conversion to DTV, for example, zoning restrictions on DTV transmitting antennas. The

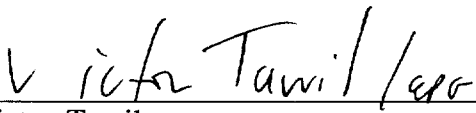
Commission should promptly put this proposal out for public comment and adopt it forthwith. The Commission should also work with the FAA to expedite and liberalize its tower authorization procedures. We urge the Commission to apply its own RF radiation requirements sensibly to accommodate new DTV facilities. All these steps and others may be especially appropriate to facilitate tower construction, particularly the construction of joint towers for all or most of a market's new DTV facilities.

* * *

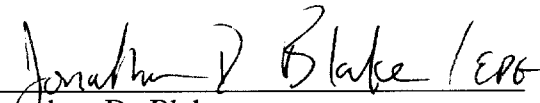
As set forth above, the Commission should clarify, revise, and provide for limited exemptions to the decisions reflected in the R&Os.

Respectfully submitted,

ASSOCIATION FOR MAXIMUM
SERVICE TELEVISION, INC.

 Victor Tawil /ero

Victor Tawil
Senior Vice President
Association for Maximum
Service Television, Inc.
1776 Massachusetts Avenue, NW
Suite 310
Washington, DC 20036
Phone: (202) 861-0344
Fax: (202) 861-0342

 Jonathan D. Blake /ero

Jonathan D. Blake
Ellen P. Goodman
Victoria M. Huber
Covington & Burling
1201 Pennsylvania Avenue, NW
Post Office Box 7566
Washington, DC 20044-7566
Phone: (202) 662-6000
Fax: (202) 662-6291

Its Attorneys

June 13, 1997

ABC, INC.

/s/ Sam Antar

Vice President, Law and Regulation
77 West 66th Street
16th Floor
New York, New York 10023
Phone: (212) 456-6222
Fax: (212) 456-6202

CBS, INC.

/s/ Mark W. Johnson

Mark W. Johnson
Associate General Counsel
600 New Hampshire Ave., NW
Suite 1200
Washington, DC 20037
Phone: (202) 457-4513
Fax: (202) 457-4611

NATIONAL ASSOCIATION OF
BROADCASTERS

/s/ Henry L. Baumann

Henry L. Baumann
Executive Vice President &
General Counsel
1771 N Street, NW
Washington, DC 20036-2891
Phone: (202) 429-5458
Fax: (202) 429-3526

ASSOCIATION OF AMERICA'S
PUBLIC TELEVISION STATIONS

/s/ Marilyn Mohrman-Gillis

Marilyn Mohrman-Gillis
Vice President, Policy and
Legal Affairs
1350 Connecticut Avenue, NW
Washington, DC 20036
Phone: (202) 887-1700
Fax: (202) 293-2422

CHRIS-CRAFT INDUSTRIES, INC.

/s/ John C. Siegal

John C. Siegal
Senior Vice President
650 California Street
San Francisco, CA 94108
Phone: (415) 249-4405
Fax: (415) 397-1924

NATIONAL BROADCASTING
COMPANY, INC.

/s/ Michael J. Sherlock

Michael J. Sherlock
Executive Vice President,
Technology
30 Rockefeller Plaza
Suite 1022
New York, New York 10112
Phone: (212) 664-4444
Fax: (212) 664-7070

PUBLIC BROADCASTING SERVICE

/s/ Paula A. Jameson

Paula A. Jameson
Senior Vice President
General Counsel and Secretary
1320 Braddock Place
Alexandria, VA 22314
Phone: (703) 739-5464
Fax: (703) 739-5358

TRIBUNE BROADCASTING
COMPANY

/s/ Dennis FitzSimons

Dennis FitzSimons
Executive Vice President
435 N. Michigan Avenue
Chicago, IL 60611
Phone: (312) 222-9100
Fax: (312) 222-4206

A.H. BELO CORPORATION

/s/ Michael J. McCarthy
Michael J. McCarthy
Senior Vice President/Secretary
and General Counsel
400 South Record Street
17th Floor
Dallas, TX 75202
Phone: (214) 977-8249
Fax: (214) 977-9209

APPLE VALLEY BROADCASTING, INC.

/s/ Robert J. Rini
Robert J. Rini
Rini & Coran, P.C.
Suite 900
1350 Connecticut Avenue, N.W.
Washington, DC 20036
Phone: (202) 296-2007
Fax: (202) 429-0551

Its Attorney

BONNEVILLE INTERNATIONAL CORPORATION

/s/ David K. Redd
David K. Redd
Vice President, Secretary and General Counsel
P.O. Box 1160
Salt Lake City, UT 84110-1160
Phone: (801) 575-7517
Fax: (801) 575-7548

BRUNSON COMMUNICATIONS, INC.

/s/ Barry Wood
Barry Wood
Wood & Brinton, Chartered
2300 M Street, N.W.
Suite 900A
Washington, DC 20037
Phone: (202) 293-5333
Fax: (202) 293-2509

Its Attorney

ALLBRITTON COMMUNICATIONS COMPANY

/s/ Jerald N. Fritz
Jerald N. Fritz
Vice President
Legal & Strategic Affairs
808 Seventeenth St., N.W.
Suite 300
Washington, DC 20006
Phone: (202) 728-4383
Fax: (202) 331-1898

BENEDEK BROADCASTING CORPORATION

/s/ K. James Yager
K. James Yager
Executive Vice President
Stewart Square Building
308 West State Street
Suite 210
Rockford, IL 61101
Phone: (815) 987-5329
Fax: (815) 987-5335

BROOKS BROADCASTING

/s/ Barry Wood
Barry Wood
Wood & Brinton, Chartered
2300 M Street, N.W.
Suite 900A
Washington, DC 20037
Phone: (202) 293-5333
Fax: (202) 293-2509

Its Attorney

CALIFORNIA OREGON BROADCASTING, INC.

/s/ Marnie K. Sarver
Marnie K. Sarver
Reed Smith Shaw & McClay
1301 K Street, N.W.
Suite 1100 - East Tower
Washington, DC 20005
Phone: (202) 414-9209
Fax: (202) 414-9299

Its Attorney

CAPITOL BROADCASTING COMPANY, INC.

/s/ Marvin Rosenberg
Marvin Rosenberg
Edward W. Hummers, Jr.
Holland & Knight
2100 Pennsylvania Ave., N.W.
Suite 400
Washington, DC 20037-3202
Phone: (202) 457-7145
Fax: (202) 955-5564

Its Attorneys

CHRONICLE BROADCASTING COMPANY

/s/ Jonathan D. Blake
Jonathan D. Blake
Covington & Burling
1201 Pennsylvania Ave., N.W.
P.O. Box 7566
Washington, DC 20044
Phone: (202) 662-6000
Fax: (202) 662-6291

Its Attorney

COMMUNITY TELEVISION OF SOUTHERN CALIFORNIA

/s/ Susan E. Reardon
Susan E. Reardon
Senior Vice President & General Counsel
4401 Sunset Boulevard
Los Angeles, CA 90027
Phone: (213) 953-5209
Fax: (213) 664-3638

COSMOS BROADCASTING CORPORATION

/s/ Werner K. Hartenberger
Werner K. Hartenberger
Dow, Lohnes & Albertson
1200 New Hampshire Avenue, N.W.
Suite 800
Washington, DC 20036
Phone: (202) 776-2000
Fax: (202) 776-2222

Its Attorney

CURATORS OF THE UNIVERSITY OF MISSOURI
STATION KOMU-TV

/s/ Thomas Gray
Thomas Gray
General Manager
Highway 63 South
Columbia, MO 65201
Phone: (573) 882-8888
Fax: (573) 884-8888

/s/ Mark Dreistadt
Mark Dreistadt
General Manager
2510 Parkway Center
Decatur, IL 62526
Phone: (217) 428-2323
Fax: (217) 428-6455

DECATUR FOURSQUARE BROADCASTING, INC.

DISPATCH BROADCASTING GROUP

/s/ R. Clark Wadlow
R. Clark Wadlow
Sidley & Austin
1722 I Street, N.W.
Washington, DC 20005
Phone: (202) 736-8215
FAX: (202) 736-8711

Its Attorney

EAGLE COMMUNICATIONS, INC.

/s/ Brian M. Madden
Brian M. Madden
Leventhal, Senter & Lerman
2000 K Street, N.W.
Suite 600
Washington, DC 20006
Phone: (202) 429-8970
Fax: (202) 293-7783

Its Attorney

GANNETT BROADCASTING

/s/ Marnie K. Sarver

Marnie K. Sarver
Reed, Smith, Shaw & McClay
1301 K Street, N.W.
Suite 1100 - East Tower
Washington, DC 20005-9209
Phone: (202) 414-9200
Fax: (202) 414-9299

Its Attorney

GOLDEN EMPIRE TELEVISION CORPORATION

/s/ Barry Wood

Barry Wood
Wood & Brinton, Chartered
2300 M Street, N.W.
Suite 900A
Washington, DC 20037
Phone: (202) 293-5333
Fax: (202) 293-2509

Its Attorney

GRANITE BROADCASTING CORPORATION

/s/ Thomas W. Davidson

Thomas W. Davidson P.C.
Akin, Gump, Strauss, Hauer & Feld LLP
1333 New Hampshire Avenue, N.W.
Suite 400
Washington, DC 20036
Phone: (202) 887-4011
Fax: (202) 887-4288

Its Attorney

/s/ Marvin Rosenberg

Marvin Rosenberg
Holland & Knight
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202
Phone: (202) 955-3000
Fax: (202) 955-5564

Its Attorney

HUBBARD BROADCASTING INC.

/s/ Marvin Rosenberg

Marvin Rosenberg
Edward W. Hummers, Jr.
Holland & Knight
2100 Pennsylvania Ave., N.W.
Suite 400
Washington, DC 20037-3202
Phone: (202) 457-7145
Fax: (202) 955-5564

Its Attorneys

/s/ Marvin Rosenberg

Marvin Rosenberg
Edward W. Hummers, Jr.
Holland & Knight
2100 Pennsylvania Ave., N.W.
Suite 400
Washington, DC 20037-3202
Phone: (202) 457-7145
Fax: (202) 955-5564

Its Attorneys

JEFFERSON-PILOT COMMUNICATIONS COMPANY

/s/ Daniel K. McAlister

Daniel K. McAlister, Esq.
Sr. Vice President, General Counsel
and Secretary
100 North Greene Street
P.O. Box 21008
Greensboro, NC 27420
Phone: (910) 691-3317
Fax: (910) 691-3222

/s/ Tom L. Johnson

Tom L. Johnson
President
United Media, Inc., General Partner
101 E. Main
Suite 300
Denison, TX 75020
Phone: (903) 465-5836
Fax: (903) 465-1368

KTEN TELEVISION LIMITED PARTNERSHIP

LEE ENTERPRISES, INCORPORATED

/s/ Marnie K. Sarver
Marnie K. Sarver
Reed, Smith, Shaw & McClay
1301 K Street, N.W.
Suite 1100 - East Tower
Washington, DC 20005
Phone: (202) 414-9200
Fax: (202) 414-9299

Its Attorney

LIN TELEVISION CORPORATION

/s/ Gregory M. Schmidt
Gregory M. Schmidt
Vice President/New Development
and General Counsel
1001 G Street, N.W.
Washington, DC 20001
Phone: (202) 879-9355
Fax: (202) 879-9397

MEREDITH CORPORATION

/s/ Philip A. Jones
Philip A. Jones
President - Broadcasting Group
1716 Locust Street
Des Moines, IA 50309-3023
Phone: (515) 284-3717
Fax: (515) 284-2700

NEWSWEB CORPORATION

/s/ Marvin Rosenberg
Marvin Rosenberg
Edward W. Hummers, Jr.
Holland & Knight
2100 Pennsylvania Ave., N.W.
Suite 400
Washington, DC 20037-3202
Phone: (202) 457-7145
Fax: (202) 955-5564

Its Attorneys

LINCOLN BROADCASTING COMPANY, A
CALIFORNIA LIMITED PARTNERSHIP

/s/ Michael D. Berg
Michael D. Berg
Julian L. Shepard
Verner, Liipfert, Bernhard, McPherson & Hand
901 Fifteenth Street, N.W.
Washington, DC 20005-2301
Phone: (202) 371-6099
Fax: (202) 371-6279

Its Attorneys

MAINE RADIO AND TELEVISION CO.

/s/ Lew Colby
Lew Colby
Executive Vice President/Chief Executive
Officer
One Congress Square
Portland, ME 04101
Phone: (207) 828-6666
Fax: (207) 828-6620

MIDWEST TELEVISION, INC.

/s/ Jonathan D. Blake
Jonathan D. Blake
Covington & Burling
1201 Pennsylvania Ave., N.W.
P.O. Box 7566
Washington, DC 20044
Phone: (202) 662-6000
Fax: (202) 662-6291

Its Attorney

PAXSON COMMUNICATIONS CORPORATION - KZKI

/s/ Frank Martin
Frank Martin
Chief Engineer
9229 Utica Avenue, #155
Rancho Cucamonga, CA 91730
Phone: (909) 483-3030
Fax: (909) 483-0333

PAXTON MEDIA GROUP, INC.

/s/ Jonathan D. Blake
Jonathan D. Blake
Covington & Burling
1201 Pennsylvania Ave., N.W.
P.O. Box 7566
Washington, DC 20044
Phone: (202) 662-6000
Fax: (202) 662-6291

Its Attorney

POST-NEWSWEEK STATIONS, INC.

/s/ Robert E. Branson
Robert E. Branson
Vice President, Legal Affairs
3 Constitution Plaza
Hartford, CT 06103
Phone: (860) 493-6538
Fax: (860) 493-2490

QUINCY NEWSPAPERS, INC.

/s/ Thomas A. Oakley
Thomas A. Oakley
P.O. Box 909
130 South Fifth Street
Quincy, IL 62306-0909
Phone: (217) 221-3331
Fax: (217) 221-3323

SANGER TELECASTERS, INC. (KMSG TV)

/s/ Diane D. Dostinich
Diane D. Dostinich
President
706 West Herndon Avenue
Fresno, CA 93650
Phone: (209) 435-5900
Fax: (209) 435-1448

PETRA COM BROADCASTING, INC.

/s/ M. Scott Johnson
M. Scott Johnson
Gardner, Carton & Douglas
1301 K Street, N.W.
Suite 900, East Tower
Washington, DC 20005
Phone: (202) 408-7122
Fax: (202) 289-1504

Its Attorney

PULITZER BROADCASTING COMPANY

/s/ Erwin G. Krasnow
Erwin G. Krasnow
Julian L. Shepard
Verner, Liipfert, Bernhard, McPherson & Hand
901 15th Street, N.W., Suite 700
Washington, DC 20005-2301
Phone: (202) 371-6000
Fax: (202) 371-6279

Its Attorneys

RETLAW ENTERPRISES INC.

/s/ Carl R. Ramey
Carl R. Ramey
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, DC 20006
Phone: (202) 429-3388
Fax: (202) 429-7049

Its Attorney

SARKES TARZIAN, INC.

/s/ Brian M. Madden
Brian M. Madden
Leventhal, Senter & Lerman
2000 K Street, N.W.
Suite 600
Washington, DC 20006
Phone: (202) 429-8970
Fax: (202) 293-7783

Its Attorney

SHOCKLEY COMMUNICATIONS CORPORATION

/s/ Jerold L. Jacobs
Jerold L. Jacobs
Rosenman & Colin LLP
1300 Nineteenth Street, N.W.
Suite 200
Washington, DC 20036
Phone: (202) 463-4644
Fax: (202) 429-0046

Its Attorney

SPOKANE TELEVISION, INC.

/s/ Robert J. Rini
Robert J. Rini
Rini, Coran & Lancellota, P.C.
Suite 900
1350 Connecticut Avenue, N.W.
Washington, DC 20036
Phone: (202) 296-2007
Fax: (202) 429-0551

Its Attorney

TELEVISION WISCONSIN, INC.

/s/ Robert J. Rini
Robert J. Rini
Rini, Coran & Lancellota, P.C.
Suite 900
1350 Connecticut Avenue, N.W.
Washington, DC 20036-1701
Phone: (202) 296-2007
Fax: (202) 429-0551

Its Attorney

UNITED COMMUNICATIONS CORPORATION

/s/ Barry Wood
Barry Wood
Wood & Brinton, Chartered
2300 M Street, N.W.
Suite 900A
Washington, DC 20037
Phone: (202) 293-5333
Fax: (202) 293-2509

Its Attorney

WIPB-TV

/s/ Robert R. Smith
Robert R. Smith
Station Manager
E.F. Ball Building
Ball State University
Muncie, IN 47304
Phone: (765) 285-1249
Fax: (765) 285-5548

WLEX, INC.

/s/ Marvin Rosenberg
Marvin Rosenberg
Edward W. Hummers, Jr.
Holland & Knight
2100 Pennsylvania Ave., N.W.
Suite 400
Washington, DC 20037-3202
Phone: (202) 457-7145
Fax: (202) 955-5564

Its Attorneys

WMTW-TV

/s/ David Kaufman
David Kaufman
Vice President and General Manager
P.O. Box 8
Auburn, ME 04210
Phone: (207) 782-1800 x310
Fax: (207) 783-7371

WTTW/CHANNEL 11

/s/ Larry W. Ocker
Larry W. Ocker
Senior Vice President for Engineering
5400 N. St. Louis Avenue
Chicago, IL 60625
Phone: (773) 509-5454
Fax: (773) 509-5303

RECEIVED

JUN 13 1997

Federal Communications Commission
Office of Secretary

Exhibit 1

Technical Note for Understanding NTSC and DTV Service Area Maps

Specific attributes of the NTSC and DTV service area maps are provided below. Note that the maps are plotted to the scale indicated in the lower right hand corner. The scale is the same for both maps so that they can be directly compared, except for stations that have a minimum or a maximum power cap. Reference latitude and longitude, counties and some major geographical features are also plotted on the maps. The correlation between these maps and calculations performed by the FCC has been verified to be very close. The same terrain database was used. However, algorithmic differences between the Broadcasters Caucus model (adapted to the FCC methodology) and the FCC model may result in small coverage or interference differences between the two methods.

NTSC Map

The NTSC map is based on the April 3, 1997 version of the FCC engineering database. Operating parameters of the NTSC operation taken from that database include tower location, antenna height above average terrain (HAAT), directional antenna pattern (if any), and effective radiated power (ERP). From this information, the conventional predicted Grade B contour using the FCC propagation curves is plotted in black.

Within this predicted Grade B contour, service area losses are plotted (as radial lines every one degree and evaluated every one km along each radial) for the effects of terrain using the Longley-Rice propagation model (marked in red), interference from either other NTSC stations (marked in green) or DTV stations (marked in blue) that exceed the criteria established by the FCC for acceptable viewing. The service area that remains is the white area within the Grade B contour. Service outside the predicted Grade B contour is not evaluated.

DTV Map

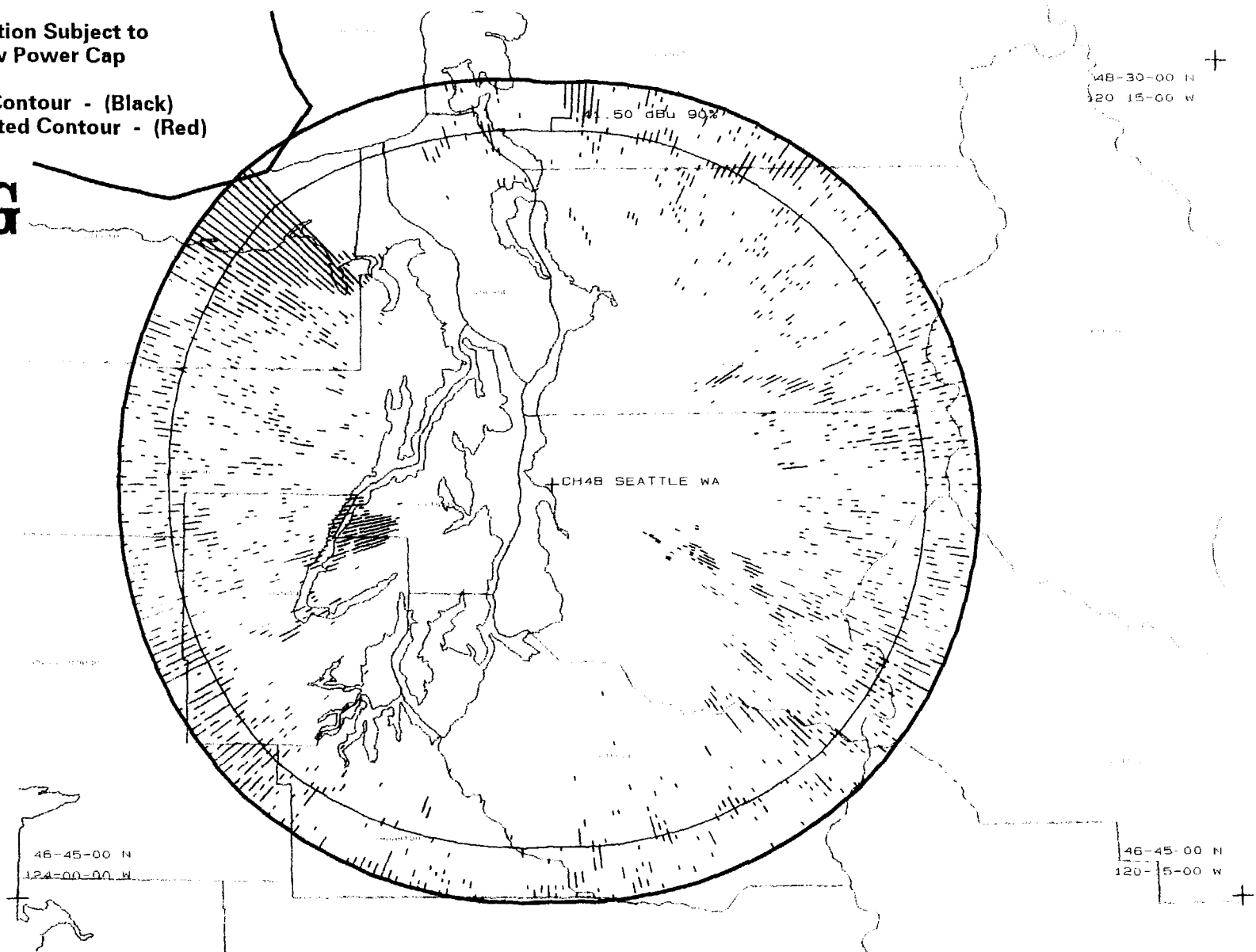
The DTV channel assigned by the FCC is used to generate this map, using the same applicable parameter values as for the NTSC map: i.e., tower location, antenna height, antenna directional pattern are the same for the DTV channel analysis as for the paired NTSC channel. Using the FCC F(50,90) curves, the noise-limited service area for the DTV channel is plotted in red.

Within this predicted noise-limited area, service losses are plotted (as radial lines every one degree and every one km along each radial) for the effects of terrain using the Longley-Rice propagation model (marked in red), interference from either other DTV stations (marked in green) or NTSC stations (marked in blue) that exceed the criteria established by the FCC for acceptable viewing. The service area that remains is the white area within the noise-limited contour. Service outside the predicted noise-limited contour is not evaluated except in the case of UHF stations that are assigned the maximum one-megawatt power cap. In this case, service is calculated out to the Grade B contour of the companion NTSC channel. For DTV stations that are assigned a minimum ERP (1 kW for low VHF, 3.2 kW for high VHF and 50 kW for UHF), the NTSC station's Grade B contour is also plotted in black. For those stations, the NTSC Grade B contour is generally inside the predicted noise-limited contour of the associated DTV station.

DTV Station Subject to
1000 kw Power Cap

Grade B Contour - (Black)
Noise-Limited Contour - (Red)

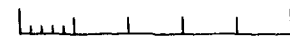
KING
(DTV)



Terrain loss - Red, Interference NTSC - Blue, DTV - Green

KING-DTV Ch. 48 ERP 1000.0 HAAT 257.6

SEATTLE WA Dir. Ant. NONE



MAJOR DIVISIONS ARE: 10.0 KM

SCALE IS: 31.39 KM/INCH

19.51 MILES/INCH

DTV Station Subject to
50 kw Minimum

Grade B Contour - (Black)
Noise-Limited Contour - (Red)

124-45-00 W

KMTX
(DTV)

41.27 dBu 90%

43-45-00 N
122-00-00 W

+CH45 ROSEBURG

42-30-00 N
124-45-00 W

42-30-00 N
122-00-00 W

Terrain loss - Red, Interference NTSC - Blue, DTV - Green

KMTX-DTV Ch. 45 ERP 50.0 HAAT 122.7

ROSEBURG OR Dir. Ant. NONE



MAJOR DIVISIONS ARE: 10.0 KM

SCALE IS: 23.10 KM/INCH

14.36 MILES/INCH

Exhibit 3

A

.

COMPARISON OF DTV STATION SERVICE AREA, POPULATION AND REPLICATION FOR CAPPED DTV STATIONS

Call Sign	State	City	<u>DTV Service</u> (Appendix B)			<u>DTV Service</u> (Corrected to reflect protected service)		
			Area (sq. km)	People	Match (%)	Area (sq. km)	People	Match (%)
WBRC	AL	BIRMINGHAM	37021.4	1645551	98.6	33609.2	1576906	91.8
WTVY	AL	DOTHAN	48490.6	797486	99.1	44459.7	762665	93.1
WDIQ	AL	DOZIER	25395.1	465576	97.9	19695.9	242918	80.7
WKRQ	AL	MOBILE	49603.6	1304992	99.3	46442.1	1239985	93.2
WSFA	AL	MONTGOMERY	44009.2	917465	99.4	42851.5	903686	97.7
WCIQ	AL	MOUNT CHEAHA	42848.4	2015568	99.2	41723.6	1950636	97.6
WAKA	AL	SELMA	39235.9	670370	99.2	38918.1	666594	98.8
KFSM	AR	FORT SMITH	32134.6	627464	97.6	31345.1	619101	95.8
KAIT	AR	JONESBORO	40563.4	706147	99.4	39900.7	671842	98.6
KETS	AR	LITTLE ROCK	44739.9	995097	97.5	40271.4	948279	92.7
KARK	AR	LITTLE ROCK	43093.7	1000233	98.6	40275.7	973857	94.2
KEMV	AR	MOUNTAIN VIEW	37883.6	524955	98.7	35066.3	461679	94.3
KNAZ	AZ	FLAGSTAFF	37452.8	172762	91.2	35831.3	171812	87.3
KMOH	AZ	KINGMAN	32081.6	120082	81.5	30663	116063	78
KTVK	AZ	PHOENIX	37248.5	2234194	91.1	35820.6	2230567	88.2
KPHO	AZ	PHOENIX	37657.7	2233692	93.5	36803	2231675	91.8
KHSL	CA	CHICO	28931.7	572203	99.1	26553.8	547579	91.3
KIEM	CA	EUREKA	31358.8	134432	89.7	30465.9	134078	87.3
KVIQ	CA	EUREKA	39129.6	141200	93.5	36066.7	137900	86.3
KTLA	CA	LOS ANGELES	38132.1	13421653	80	37028.7	13411960	77.7
KTVU	CA	OAKLAND	34242.3	5849558	92.2	30680.6	5736858	82.5
KCRA	CA	SACRAMENTO	40727.3	4587675	94.7	37549.6	4486872	88.2
KVIE	CA	SACRAMENTO	38024.1	4474387	95.3	34455.7	4405904	87.1
KXTV	CA	SACRAMENTO	36248.7	4407324	98.1	35091.2	4368051	95.7

Call Sign	State	City	DTV Service (Appendix B)			DTV Service (Corrected)		
			Area (sq. km)	People	Match (%)	Area (sq. km)	People	Match (%)
KFMB	CA	SAN DIEGO	23979.3	2708028	98.1	21010.6	2616745	88
KGTV	CA	SAN DIEGO	20831.6	2693399	99.1	20846.7	2694256	99.1
KRON	CA	SAN FRANCISCO	35694.3	5887575	92.9	31817.5	5743838	82.7
KPIX	CA	SAN FRANCISCO	37386.6	6124835	95.2	35614.8	6046859	90.8
KSBY	CA	SAN LUIS OBISPO	41208.3	401666	95.7	39093.6	400218	91.3
KBDI	CO	BROOMFIELD	30942.4	2175279	96.9	30494.5	2174829	95.8
KWGN	CO	DENVER	28637.9	2275214	90.8	25123	2229577	80.6
KCNC	CO	DENVER	32215.2	2270518	89.7	28062.4	2257889	80.5
KRMA	CO	DENVER	28083.2	2278226	96	25561.6	2239011	89.7
KMGH	CO	DENVER	26112.7	2251594	98.9	25832.5	2243411	98.2
KUSA	CO	DENVER	25524.7	2243738	99.4	25342.9	2240113	98.9
KOAA	CO	PUEBLO	31396	587724	92.9	30135.3	587234	89.6
KTVS	CO	STERLING	26301.1	71278	100	24701.9	68137	97
WRC	DC	WASHINGTON	27378.1	6549431	98.6	22433.8	6292164	86.2
WJLA	DC	WASHINGTON	24303.9	6363813	98.8	22465.9	6269697	92.9
WUSA	DC	WASHINGTON	24594.2	6431434	99.7	23117.7	6355012	95.6
WHYY	DE	WILMINGTON	23453.1	7624023	99.3	22469.8	7464621	96.9
WUFT	FL	GAINESVILLE	31813.8	1198091	99.3	27213.6	943094	86.3
WJXT	FL	JACKSONVILLE	33334	1213182	99.3	28905.7	1095740	88.3
WPBT	FL	MIAMI	32731.3	3999668	99.1	30778.7	3983001	94.8
WFOR	FL	MIAMI	33890.2	4011126	99.2	31984.5	3998471	93.6
WTVJ	FL	MIAMI	47140.1	3615382	98.5	44248.6	3543491	92.9
WCPX	FL	ORLANDO	41813.1	2578525	99.2	36103.4	2400886	92.3
WJHG	FL	PANAMA CITY	27023.7	394342	99.4	25248.6	362305	94.2
WEAR	FL	PENSACOLA	36739.1	1106361	99.3	36251.1	1103269	98.6
WFSU	FL	TALLAHASSEE	25776.1	428515	99.1	24481.9	415059	95.6
WEDU	FL	TAMPA	43389.2	3706250	99.2	37869.9	3452733	88.9
WPTV	FL	WEST PALM BEACH	33756.6	4045550	99.4	28214.4	3665603	85.7
WSB	GA	ATLANTA	32321.9	3519677	98.8	29442.6	3444260	91.7
WAGA	GA	ATLANTA	32868.7	3535264	99.2	31057.2	3498036	94.4
WJBF	GA	AUGUSTA	38856.6	1205113	99.2	35611.5	1114296	94.7
WRBL	GA	COLUMBUS	47061.6	1271038	99.2	46033.8	1246387	98.3
WMAZ	GA	MACON	25556.7	675088	99.3	22843.7	613923	94.1

Call Sign	State	City	DTV Service (Appendix B)			DTV Service (Corrected)		
			Area (sq. km)	People	Match (%)	Area (sq. km)	People	Match (%)
WSAV	GA	SAVANNAH	41974.1	738449	99.3	38666.4	709444	95.5
WCTV	GA	THOMASVILLE	52022.8	885982	99.3	44931.9	829523	91.7
WOI	IA	AMES	48378.7	980762	99.9	41746.5	898193	93.5
KGAN	IA	CEDAR RAPIDS	40102.5	868304	99.7	35856.4	810070	93.1
KCRG	IA	CEDAR RAPIDS	44135.9	951312	100	43498	932569	99.6
KWQC	IA	DAVENPORT	38072.5	1182595	99.7	33622.9	965990	93.7
KDIN	IA	DES MOINES	44638.6	919079	100	44191.9	915127	99.6
KIMT	IA	MASON CITY	42434	751809	99.9	38589.2	703662	95.9
KTIV	IA	SIOUX CITY	49421.1	648950	100	44573	605980	95.9
KWWL	IA	WATERLOO	43895.2	922848	100	42928.1	907546	99.1
KIDK	ID	IDAHO FALLS	37236.4	234236	91.5	34562.3	232205	85.2
KLEW	ID	LEWISTON	24938.4	131202	84.7	23628.8	129436	80.6
KPVI	ID	POCATELLO	32939.1	266058	90.7	29150.3	240670	81.7
WSIU	IL	CARBONDALE	26541.6	767918	99.5	25214	701883	97.8
WCIA	IL	CHAMPAIGN	32479.1	892584	99.8	27390.9	791125	95.9
WSIL	IL	HARRISBURG	34599.6	761570	99.5	31414.7	678842	97.3
WGEM	IL	QUINCY	26218.1	312345	99.9	22782.2	291235	91.1
WHBF	IL	ROCK ISLAND	38355.7	1200013	99.9	33491.5	961868	93.1
WREX	IL	ROCKFORD	24087	1446397	100	21123.9	1110523	94.7
WTTV	IN	BLOOMINGTON	31751.1	2085013	99.7	30743.4	2050232	98.5
WNIN	IN	EVANSVILLE	22414.4	717230	99.6	19747.1	663875	93.8
WRTV	IN	INDIANAPOLIS	32447.7	2387436	99.8	29990.6	2335078	95.9
WTHR	IN	INDIANAPOLIS	27492.6	2270470	99.7	26946.1	2248551	99
WTWO	IN	TERRE HAUTE	32406.1	917639	99.6	28507.7	749645	96.7
KLBY	KS	COLBY	28807	51335	99.6	25444.7	40829	93.1
KSNC	KS	GREAT BEND	32743.3	206557	99.6	30375.2	198302	95
KBSH	KS	HAYS	24816.7	99974	99.7	24271.1	98982	98.4
KPTS	KS	HUTCHINSON	24109.7	669024	99.6	23640.5	663392	99.1
KSWK	KS	LAKIN	25674.8	88007	99.6	21585.7	73036	90.4
KSNW	KS	WICHITA	32850.1	683750	99.4	28621.2	675383	94
WBKO	KY	BOWLING GREEN	24723.4	582186	99.4	23276.1	528326	96.3
WAVE	KY	LOUISVILLE	45516	2916893	99.3	41046.5	2630810	94.2
WPSD	KY	PADUCAH	43741.6	870782	99.5	41071.1	840960	96.4
KALB	LA	ALEXANDRIA	43876.7	997115	99.3	40690.4	904890	92.8

Call Sign	State	City	DTV Service (Appendix B)			DTV Service (Corrected)		
			Area (sq. km)	People	Match (%)	Area (sq. km)	People	Match (%)
WBRZ	LA	BATON ROUGE	46124.8	2467281	99.2	41708	2215507	91.4
KAQY	LA	COLUMBIA	43220.4	691514	99.2	42214.3	680437	98.5
KATC	LA	LAFAYETTE	47357.1	930398	99.4	44486.5	879868	96.8
KLFY	LA	LAFAYETTE	41215.6	999306	99.2	40901.1	997372	98.5
KNOE	LA	MONROE	43605.9	727278	99.5	42735.4	718289	98.1
WWL	LA	NEW ORLEANS	34020	1783829	99.4	31191.7	1734076	92.6
WDSU	LA	NEW ORLEANS	33347.9	1804433	99.2	28866.3	1687312	87.1
KTBS	LA	SHREVEPORT	47114.1	1085664	99.2	44410.8	1040330	97.8
WGBH	MA	BOSTON	30444.1	6768976	98.2	30137.7	6749761	97.3
WCVB	MA	BOSTON	30475.1	6771787	98.3	29149	6710431	95.5
WLNE	MA	NEW BEDFORD	30371.8	4880700	99.4	25904.7	4435585	90.8
WMAR	MD	BALTIMORE	30531.7	7302540	97.6	26003.8	6851385	86.3
WBAL	MD	BALTIMORE	26623.1	6825491	98.7	24152.4	6545067	91.5
WJZ	MD	BALTIMORE	27349.2	6852500	99.4	26162.8	6699928	97.7
WLBZ	ME	BANGOR	22293.3	325035	99.9	21750.6	321135	98.1
WCSH	ME	PORTLAND	35408.7	1142529	94.8	33022.6	1091447	89.4
WCML	MI	ALPENA	38277.1	257181	99.4	34286.2	248473	92.9
WNEM	MI	BAY CITY	33540.9	1941712	100	31688.7	1771586	97.4
WBKP	MI	CALUMET	23259.2	54564	99.9	20645.5	53470	90.6
WTOM	MI	CHEBOYGAN	26798.2	155338	100	23280.2	129609	89.5
WJBK	MI	DETROIT	32149.8	5771220	98.1	27345.2	5478276	92.1
WDIV	MI	DETROIT	32370.2	5744010	98.1	28307	5481698	94.5
WXYZ	MI	DETROIT	27055.1	5528579	99.5	26474.9	5485097	98.7
WJMN	MI	ESCANABA	36022.9	173859	99.9	31557.7	166014	88.8
WLNS	MI	LANSING	31824.7	2933738	99.7	26396.3	2583837	97.3
WLUC	MI	MARQUETTE	32908.5	192079	99.9	29086.5	183617	94
WILX	MI	ONONDAGA	27134.2	2181254	99.9	26526.3	2099454	98.9
WGTQ	MI	SAULT STE. MARIE	27193.1	83617	99.9	25302.6	80148	94.6
KAAL	MN	AUSTIN	33918.2	601081	100	31091.1	567649	96.2
KDLH	MN	DULUTH	31611.7	277228	98.4	26689.1	251967	85.3
WDSE	MN	DULUTH	27674.5	259519	100	25308.4	246592	95
WDIO	MN	DULUTH	28134.5	260002	100	25366.5	241826	94.8
WCCO	MN	MINNEAPOLIS	40094.9	3015600	100	38058.9	2985816	97.7
KTCA	MN	ST. PAUL	37903.2	2968440	99.9	35538.2	2923912	95.6